

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions  
(formerly Eaton)

Brand: McGRAW-EDISON

Report Number: P299000

Luminaire Tested: **GLNA-AF-05-LED-E1-T2-7030-600**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P299000  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24139)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GLNA-AF-05-LED-E1-T2-7030-600  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(5) 70 CRI, 3000K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Type II OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 18539.4 lumens  
Efficiency: N/A  
Efficacy: 114.4 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type II - Medium - Full Cutoff  
BUG Rating: B3 - U0 - G3

Input Watts (W): 162  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT

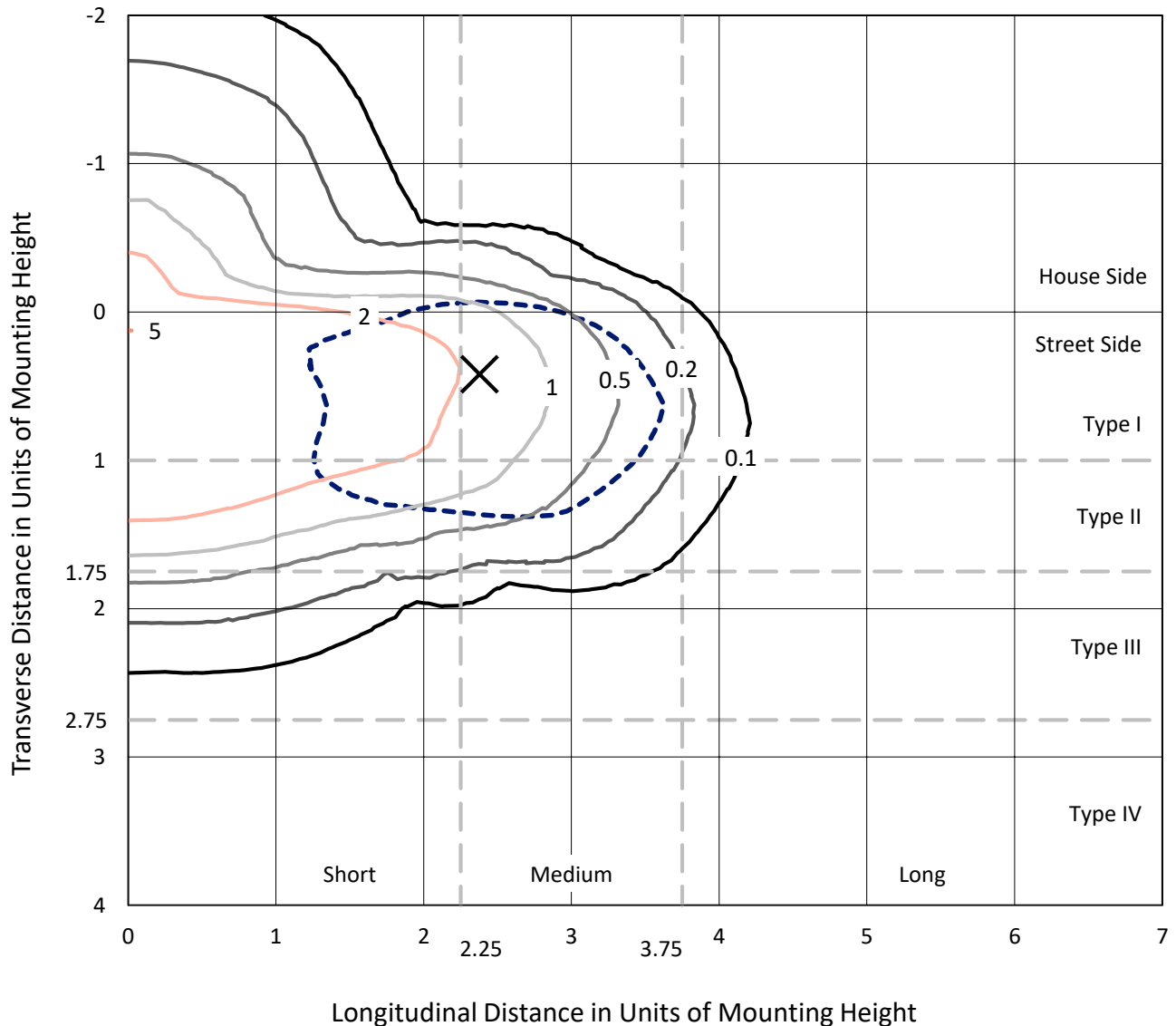


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### Iso-Footcandle Lines of Horizontal Illumination

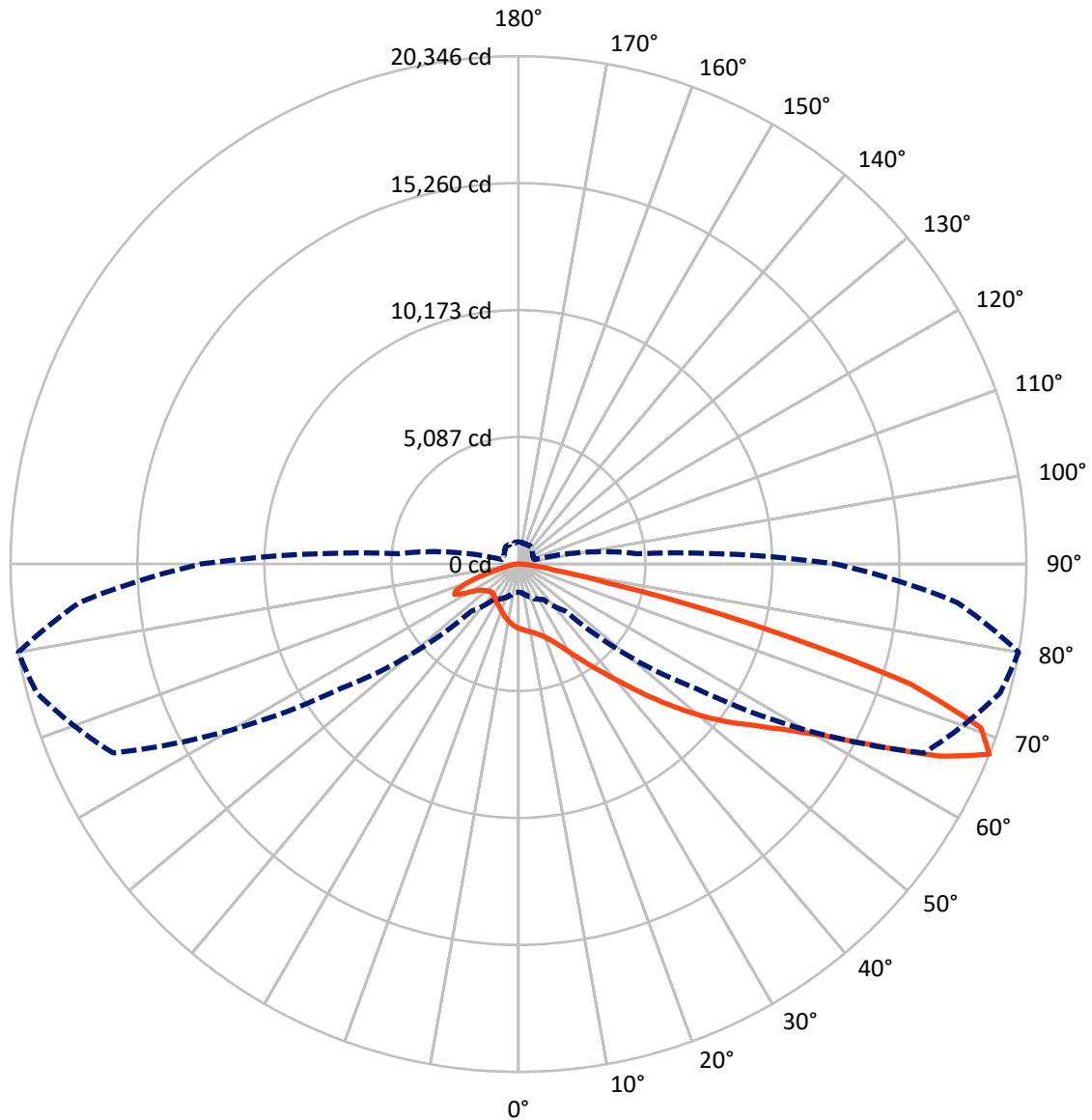
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5 fc  
 Type II - Medium - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 80-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3414.3	0.0	3414.3
	% Fixture	18.4	0.0	18.4
<b>Street Side</b>	Lumens	15125.1	0.0	15125.1
	% Fixture	81.6	0.0	81.6
<b>Total</b>	Lumens	18539.4	0.0	18539.4
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	237.6	1.3
10°-20°	684.4	3.7
20°-30°	1132.9	6.1
30°-40°	1853.1	10.0
40°-50°	2992.0	16.1
50°-60°	4319.6	23.3
60°-70°	4767.0	25.7
70°-80°	2197.3	11.9
80°-90°	355.4	1.9
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	18539.4	100.0
0°-180°	18539.4	100.0



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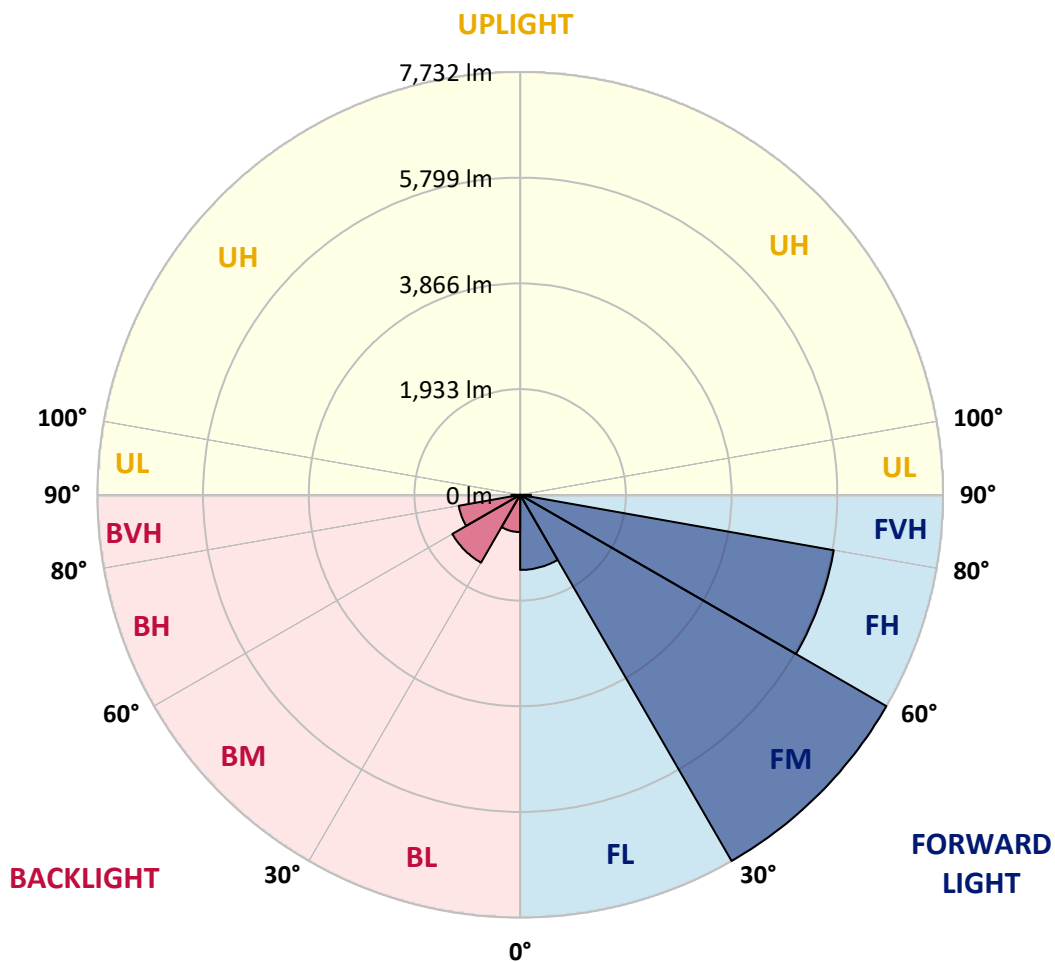
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1373.7	7.4			
FM (30°-60°)	7732.3	41.7			
FH (60°-80°)	5823.7	31.4			G3/7500
FVH (80°-90°)	195.4	1.1			G2/225
BL (0°-30°)	681.2	3.7	B2/1000		
BM (30°-60°)	1432.5	7.7	B2/2500		
BH (60°-80°)	1140.6	6.2	B3/2500		G3/2500
BVH (80°-90°)	160.0	0.9			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G3**

Type II Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	80°	85°
0°	2575.7	2575.7	2575.7	2575.7	2575.7	2575.7	2575.7	2575.7	2575.7	2575.7	2575.7
2.5°	2817.5	2801.1	2803.8	2799.3	2785.6	2761.8	2736.3	2689.7	2641.4	2615.8	2595.7
5°	3053.0	3048.4	3042.0	3027.4	2992.8	2943.5	2882.3	2800.2	2711.6	2665.1	2620.4
7.5°	3229.2	3226.4	3218.2	3209.1	3175.3	3116.0	3023.8	2907.0	2778.3	2714.4	2645.0
10°	3243.8	3248.3	3254.7	3279.4	3283.9	3252.0	3158.0	3016.5	2847.6	2765.5	2677.0
12.5°	3119.6	3129.7	3154.3	3217.3	3283.9	3323.2	3274.8	3131.5	2928.9	2829.4	2717.1
15°	2955.3	2960.8	2990.9	3077.6	3197.2	3318.6	3364.2	3258.4	3033.8	2911.5	2777.4
17.5°	2885.1	2887.8	2908.8	2966.3	3077.6	3251.1	3414.4	3396.2	3162.5	3013.8	2851.3
20°	2849.5	2855.9	2886.0	2942.6	3012.8	3164.3	3421.7	3544.9	3315.9	3141.5	2944.4
22.5°	2950.8	2948.0	2959.0	2987.3	3046.6	3137.9	3416.3	3698.3	3511.2	3305.8	3065.8
25°	3187.2	3197.2	3178.0	3146.1	3165.3	3229.2	3445.5	3864.4	3755.8	3516.7	3224.6
27.5°	3524.0	3513.9	3485.6	3410.8	3371.5	3398.9	3542.2	4043.3	4059.7	3794.1	3434.5
30°	3859.8	3851.6	3824.2	3733.0	3652.6	3629.8	3730.2	4248.6	4422.1	4127.3	3691.9
32.5°	4208.5	4199.4	4173.8	4082.5	3985.8	3932.8	3997.7	4485.9	4849.2	4525.2	3994.9
35°	4638.4	4621.0	4567.2	4440.3	4345.4	4304.3	4334.4	4784.4	5342.1	4996.1	4362.7
37.5°	5042.7	5069.2	5014.4	4839.2	4715.9	4701.3	4735.1	5148.6	5873.3	5522.8	4785.3
40°	5448.9	5453.4	5404.1	5260.8	5134.0	5110.2	5195.1	5590.3	6500.3	6152.5	5299.2
42.5°	5868.7	5877.8	5794.8	5662.4	5569.3	5573.9	5670.6	6107.8	7219.5	6894.6	5890.6
45°	6366.1	6379.8	6288.5	6115.1	6030.2	6200.9	6160.8	6688.3	8008.1	7737.9	6569.7
47.5°	6886.4	6907.4	6838.0	6675.5	6569.7	6804.2	6650.9	7331.8	8856.9	8642.4	7315.3
50°	7170.2	7200.3	7267.9	7256.0	7233.2	7193.9	7197.6	8021.8	9732.2	9584.3	8082.0
52.5°	7017.8	7016.9	7263.3	7562.7	7882.1	7905.9	7863.9	8749.2	10550.0	10505.2	8804.0
55°	6320.5	6367.9	6741.2	7320.8	8193.4	8738.2	8862.4	9582.5	11353.1	11405.2	9536.9
57.5°	5159.5	5198.8	5702.6	6510.3	7773.5	9232.9	10282.5	10793.7	12251.2	12494.0	10512.5
60°	3499.3	3546.8	4080.7	5050.9	6643.6	8957.3	11634.3	12954.9	13326.4	13878.6	11881.6
62.5°	2056.3	2099.2	2534.6	3186.3	4677.6	7676.8	12227.5	16029.8	15034.1	15967.8	13969.9
65°	1415.6	1444.8	1656.6	1983.3	2687.9	5170.5	11491.9	18152.8	17661.8	18556.2	16391.3
67.5°	1139.1	1135.4	1303.3	1526.0	1730.5	2666.0	8689.9	17912.8	19972.7	20346.0	17648.1
70°	938.3	934.6	1048.7	1233.1	1382.7	1501.4	4733.3	15116.2	19501.8	19653.3	16490.8
72.5°	784.9	788.6	861.6	998.5	1134.5	1130.8	2080.1	10633.9	15341.7	16389.5	13145.7
75°	662.6	664.4	712.8	809.6	920.9	910.9	1128.1	5761.0	8918.0	9647.3	7287.0
77.5°	564.1	565.9	596.9	650.8	730.2	726.5	823.3	2488.9	3720.2	3674.6	2492.6
80°	502.9	502.9	517.5	527.5	571.4	554.9	610.6	1195.6	1572.6	1452.1	994.8
82.5°	394.3	396.1	485.6	481.9	450.0	429.0	429.0	704.6	833.3	770.3	582.3
85°	221.8	220.9	313.1	377.9	396.1	302.1	299.4	394.3	453.6	399.8	282.0
87.5°	94.9	96.7	145.1	167.9	224.5	188.0	185.3	203.5	230.9	199.9	130.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2575.7	2575.7	2575.7	2575.7	2575.7	2575.7	2575.7	2575.7	2575.7	2575.7	2575.7
2.5°	2576.6	2552.8	2500.8	2436.0	2377.6	2339.3	2304.6	2254.4	2257.1	2222.4	2196.9
5°	2574.7	2525.5	2405.0	2261.7	2123.9	2024.4	1949.5	1882.0	1865.6	1833.6	1814.5
7.5°	2576.6	2496.2	2293.6	2064.5	1893.9	1767.9	1704.0	1668.4	1660.2	1649.3	1650.2
10°	2583.0	2469.8	2171.3	1880.2	1701.3	1618.2	1602.7	1613.7	1626.4	1630.1	1631.0
12.5°	2597.6	2446.1	2037.2	1715.9	1580.8	1555.3	1581.7	1619.1	1643.8	1655.6	1654.7
15°	2630.4	2427.8	1908.5	1587.2	1514.2	1527.9	1577.2	1630.1	1665.7	1682.1	1683.0
17.5°	2666.0	2401.3	1776.1	1488.6	1464.9	1499.6	1560.7	1622.8	1666.6	1684.9	1688.5
20°	2712.6	2368.5	1637.4	1414.7	1418.3	1457.6	1515.1	1577.2	1625.5	1641.0	1648.3
22.5°	2773.7	2332.9	1516.0	1354.5	1365.4	1395.5	1440.2	1494.1	1536.1	1543.4	1549.8
25°	2855.9	2294.5	1419.3	1299.7	1304.3	1321.6	1351.7	1383.7	1412.9	1404.7	1411.0
27.5°	2966.3	2261.7	1347.2	1249.5	1241.3	1244.9	1260.4	1270.5	1286.0	1263.2	1265.9
30°	3095.9	2226.1	1291.5	1205.7	1182.9	1176.5	1180.1	1185.6	1197.5	1166.4	1161.9
32.5°	3246.5	2183.2	1239.5	1167.4	1135.4	1122.6	1124.5	1139.1	1184.7	1165.5	1155.5
35°	3421.7	2134.8	1184.7	1125.4	1103.5	1085.2	1083.4	1129.0	1265.0	1253.1	1244.0
37.5°	3627.1	2086.4	1129.9	1077.9	1079.7	1059.7	1053.3	1105.3	1280.5	1234.0	1227.6
40°	3888.1	2060.9	1083.4	1027.7	1050.5	1047.8	1035.0	1061.5	1178.3	1093.4	1082.5
42.5°	4211.2	2064.5	1048.7	973.9	1015.8	1045.0	1025.0	1025.9	1067.9	1004.0	993.9
45°	4610.1	2107.4	1024.1	931.0	976.6	1042.3	1021.3	1006.7	1010.4	976.6	971.1
47.5°	5075.6	2196.0	1006.7	895.4	939.2	1032.3	1020.4	1001.2	993.0	974.8	970.2
50°	5593.1	2324.7	993.9	861.6	905.4	1015.8	1021.3	995.8	986.6	979.3	976.6
52.5°	6101.4	2471.6	974.8	832.4	878.9	995.8	1024.1	990.3	980.2	974.8	972.0
55°	6668.2	2655.1	945.6	807.7	857.0	970.2	1024.1	982.1	971.1	972.0	971.1
57.5°	7434.0	2951.7	910.9	786.8	830.6	939.2	1006.7	972.9	959.3	960.2	961.1
60°	8630.5	3474.7	868.9	765.8	797.7	902.7	983.0	952.9	939.2	942.8	943.7
62.5°	10390.2	4242.3	814.1	734.7	763.0	863.4	950.1	927.3	913.6	922.7	922.7
65°	12219.3	4919.5	746.6	695.5	726.5	820.5	909.1	895.4	881.7	902.7	901.8
67.5°	12711.2	4768.0	679.1	652.6	690.0	773.1	859.8	852.5	845.2	881.7	879.8
70°	11292.0	3827.9	617.0	608.8	649.8	722.0	806.8	806.8	802.3	829.6	823.3
72.5°	8603.2	2714.4	557.7	562.2	604.2	666.3	749.3	755.7	748.4	762.1	756.6
75°	4605.5	1553.4	498.3	511.1	547.6	609.7	685.4	691.8	687.3	686.4	689.1
77.5°	1530.6	759.4	436.3	456.4	488.3	551.3	618.8	628.9	617.9	616.1	615.2
80°	681.8	477.3	367.8	394.3	422.6	484.6	548.5	556.8	544.9	561.3	540.3
82.5°	438.1	314.0	294.8	324.0	351.4	418.0	478.3	480.1	469.1	544.9	464.6
85°	212.7	194.4	221.8	248.3	272.0	328.6	396.1	397.0	369.6	336.8	324.9
87.5°	105.9	113.2	147.9	171.6	183.5	225.4	288.4	282.9	271.1	246.4	227.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)